

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: 5/15/02

REPLY TO
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-67)

TO: Bill Erickson - TFP/Walla Walla
Natural Resource Specialist

Proposed Action: Vegetation Management on sections of the Walla Walla-North Lewiston Transmission Line ROW. The treatment areas will be from structure 26/4 to structure 54/6. The work involved will include vegetation management in the right-of-way and around transmission line structures, access road clearing, vegetation management around switching platforms, removal of reclaim trees and danger tree clearing.

Location: The ROW is located in Columbia and Garfield Counties WA, all being in the Walla Walla Region.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposed Action: BPA proposes to clear unwanted vegetation in the rights-of-ways, around tower structures and all associated areas that may impede the operation and maintenance of the subject transmission line. All work will be in accordance with the National Electrical Safety Code and BPA standards. BPA would conduct the vegetation control with the goal of removing tall-growing vegetation that is currently or will soon be a hazard to the transmission lines and to promote low-growing plant communities in the right-of-way and to clear unwanted vegetation from rights-of-way corridors.

Analysis: This project meets the standards and guidelines for the Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) and Record of Decision (ROD).

Planning Steps

1. Identify facility and the vegetation management need.

The vegetation to be removed is of moderate density that is interspersed with cropland and deep canyons. The majority of the vegetation is conifer species with some sprouting hardwood species that occupy wetter sites. Tall growing vegetation that is currently or will soon pose a hazard to the line will be removed in an effort to promote low-growing plants. In areas where tall growing vegetation must be left in place, it may not be possible to promote low-growing plants.

The work involved will be to clear unwanted vegetation in the rights-of-ways and around tower structures that may impede the operation and maintenance of the transmission line. Also, access road clearing will be conducted.

After vegetation removal, the associated stumps will be treated to ensure that the roots are killed, preventing new sprouts and selectively eliminate tall growing vegetation before it reaches a height or density to begin competing with low-growing vegetation. All work will take place in existing rights-of-ways, along existing rights-of-way access road corridors, around steel transmission structures and around switching platforms. All work will be accomplished by selective vegetation control methods to assure that there is little potential harm to non-target vegetation and to low-growing plants. Desirable low-growing plants will not be disturbed on the right-of-way by using selective control methods and by keeping trucks and equipment on designated access roads and trails. Slash and debris will be loped and scattered or mulched. The work will provide system reliability and fire protection.

Danger trees will not be dealt with as a whole, but may be marked and identified for future action. Danger trees that are off of the right-of-way and are potentially unstable and will fall within a minimum distance or into the zone where the conductor swing will be identified. Trees that are an imminent hazard (emergency) will be removed when identified. The danger tree process requires a survey of the trees by a specialized BPA crew that identifies and marks hazard trees along the ROW. Current easement rights give BPA the right to cut danger trees without compensation since future rights were acquired at the time of original easement acquisition. The tree, if cut, remains the property of the landowner.

BPA's overall goal is to establish low-growing plant communities along the rights-of-ways to control the development of potentially threatening vegetation. The overall vegetation management scheme will be to initially clear and remove all trees using approved methods and re-seed disturbed areas with adapted grasses if needed. This should be accomplished if there are no existing low-growing species or if there is a low potential for natural re-vegetation by low-growing species and a high potential for natural re-vegetation by tall growing species. Subsequent work will include selective herbicide treatment using spot treatments, cut stump applications and localized applications. Future cycles of work will involve the treatments used in the subsequent phase of work.

The subject transmission line is a 115kV line having an easement width of 60 feet. The minimum clearance for the line is 15 feet. Vegetation control occurring in the action is designed to provide a 10-15 year maintenance free interval.

2. Identify surrounding land use and landowners/managers.

The subject corridor traverses agricultural, grazing and industrial forest lands. All land is located in mostly private land areas. There has been limited interest by local tribes in the area. No casual use by the general public is expected. Since the area is sparsely populated, the appropriate landowner is easily identified and contacted by letter or phone.

3. *Identify natural resources.*

Agricultural, grazing and industrial forest lands have all been identified in the areas along the transmission line corridor. Also the Project Manager has tentatively identified numerous creeks, rivers and springs that are located on or traverse the transmission line ROW. These areas will be positively identified as work progresses along the corridors. Some of these creeks and rivers have been identified as containing T&E species. The herbicides used for vegetation management will be consistent with what is specified in the Vegetation Management EIS. Section 3.1 of the attached checklist specifies herbicides, methods, application techniques and buffers used for particular instances of application. No herbicides will be used within 100 feet of any spring used as a domestic water source.

Prior to the beginning of the work, the contractor will be provided with a set of the project maps, as well as with the attached list of management prescriptions from the Vegetation Management EIS.

4. *Determine vegetation control and debris disposal methods.*

For streams, any wetlands or T&E streams, the methods of vegetation management will be limited to manual, mechanical, spot and localized herbicide application and ground broadcast treatments. No mechanical (machines) will be allowed within 100 feet of streams except for tower sites and access roads. Herbicides will be applied using appropriate buffers as described in the buffer tables. Suggested herbicides for use include Glyphosate, Garlon 3A, dicamba, Escort, clopyralid, picloram and 2-4-d using wick and spot foliar treatments (localized) and ground broadcast treatments with handgun only. Garlon 4 can be used with appropriate buffers. At no time will there be applications to standing or open water. Only herbicides labeled for wetland areas will be used when treating wetlands.

For areas with springs that are used as a domestic water source, no herbicides will allowed within 100 feet of the spring. Only herbicides that do not have a ground or surface water advisory will be used between 100 and 165 feet of the source. Approved herbicides include glyphosate, Imazapyr, triclopyr and Escort.

In areas not affected by water, the unwanted vegetation would be removed by employing manual (hand cutting), mechanical and herbicide application methods. Chemical means would be employed to prevent resprouts of broad leaf species. Prevention of resprouts encourages low-growing plant communities to establish themselves and flourish on the right-of-way. This approach both maximizes the use of limited resources and minimizes environmental impacts. Herbicides used would be applied by licensed applicators following manufacturers' label instructions and BPA's management prescriptions. Herbicide used would be consistent with the guidance outlined in the Vegetation Management EIS. Debris disposal methods will be by lop and scatter or mulching.

A licensed contractor would undertake the proposed work. The contractor will receive a list of required mitigation measures (management prescriptions) to follow as well as a set of maps delineating the transmission line and potential sensitive resource areas.

5. Determine re-vegetation methods, if necessary.

If required, native seed mixes will be considered in all re-vegetative mixtures, although introduced species are more competitive against invading tall tree species.

Seeding should be accomplished when there is enough moisture to allow for 2 months of growth. Seeding can be completed in the late fall, early winter or early spring.

6. Determine monitoring needs.

An inspector will monitor the work being performed at the time of the initial work. Follow-up inspections will be performed during routine regular patrols, either by ground or aerial. If required, follow-up monitoring and re-seeding, if necessary, will occur.

7. Prepare appropriate environmental documentation.

This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Ken Hutchinson

Ken Hutchinson
Environmental Scientist - KEPR

CONCUR: /s/ Thomas C. McKinney
Thomas C. McKinney
NEPA Compliance Officer

DATE: 05/28/2002

cc:

L. Croff – KEC-4
T. McKinney – KEC-4
J. Meyer – KEP-4
M. Hermeston – KEP-4
J. Sharpe – KEPR-4
K. Hutchinson - KEPR/Walla Walla
P. Key – LC-7
M. Johnson– TF/DOB-1
R. Coila – TFP/Walla Walla
M. Richardson – TFP/Walla Walla
M. Ward – TFPF/Pasco
Environmental File – KEC
Official File – KEP-4 (EQ-14)

Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Walla Walla N. Lewiston	78 miles 115kV	60	26/4 to 54/6

See Handbook — **List of Right-of-way Components** for checkboxes and the requirements for the components **Rights-of-way**, **Access Roads**, **Switch Platforms**, **Danger Trees**, and **Microwave Beam paths**.

- Right-of-Way – clearing in right-of-way
- Transmission Structures – clearing around
- Access Road clearing - approximate miles – 40
- Switch Platforms – total veg. control.
- Reclaim (“C”) Trees
- Danger Tree clearing

1.2 Describe the vegetation needing management.

See handbook — **List of Vegetation Types**, **Density**, **Noxious Weeds** for checkboxes and requirements.

Vegetation is of moderate density, which is interspersed with cropland and deep canyons. The majority of the vegetation is conifer species with some sprouting hardwood species that occupy wetter sites.

Vegetation Types:

Douglas Fir

True Fir

Pine

Alder

Willows

Cottonwood

Density:

Medium (50 – 250 stems/per acre)

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — **Communities** for requirements and checkboxes.

Tall-growing vegetation that is currently or will soon be a hazard to the line will be removed. (In places where tall growing vegetation must be left in place, it may not be possible to promote low-growing plants.)

Cut-stump or follow-up herbicide treatments on re-sprouting-type species will be carried out to ensure that the roots are killed.

Areas will be replanted or reseeded with low-growing species. [This should be done if there are no existing low-growing species or if there is a low potential for natural re-vegetation by low-growing species and a high potential for natural re-vegetation by tall-growing species.]

Suggested Seed mixture to reduce and prevent noxious weeds.

To	From	Approved and Suggested seeds	*Native	Reason for seeding
		<p>Mixes can be developed from the following seed species. Based on site and adaptation.</p> <p>____ Name</p> <p>Sheep fescue (Festuca ovina) N</p> <p>Smooth Brome I</p> <p>Canada bluegrass (Poa compressa) N</p> <p>Big Bluegrass N</p> <p>Intermediate Wheat grass I</p> <p>Bluebunch Wheat grass N</p> <p>Pubescent Wheat grass N</p> <p>Sand drop seed N</p> <p>Needle grass N</p> <p>Crested Wheat grass I</p> <p>Perennial Ryegrass I</p> <p>Sickle-keeled lupine N</p> <p>And/or Lupines bicolor N</p> <p>Clovers I</p> <p>Alfalfa I</p>	<p>N=Native</p> <p>I=Introduced</p>	<p>Re-seeding and Fertilization after noxious weed treatments has been shown to be effective in preventing the re-establishment of noxious weeds and which reduces the need for future herbicide applications</p>

Desirable low-growing plants will not be disturbed. Only selective vegetation control methods that have little potential to harm non-target vegetation will be used.

1.4 Describe overall management scheme/schedule.

See Handbook - **Overall Management Scheme/Schedule.**

Description of the Proposed Action: BPA proposes to clear unwanted vegetation in the rights-of-ways and around tower structures that may impede the operation and maintenance of the subject transmission line. Also, access road clearing will be conducted. All work will be in accordance with the National Electrical Safety Code and BPA standards. BPA plans to conduct vegetation control with the goal of removing tall growing vegetation that is currently or will soon be a hazard to the transmission line. BPA’s overall goal is to have low-growing plant communities along the rights-of-way to control the development of potentially threatening vegetation. All tall growing tree species over 1 foot tall.

The width of the ROW easement is 60 feet. All work will be accomplished by selective and non-selective vegetation control methods to assure that there is little potential harm to non-target vegetation and to low-growing plants. The work will provide system reliability.

Initial entry –

Brush management on the ROW work will be to clear tall growing vegetation that is currently or will soon pose a hazard to the lines; treat the few associated hardwood stumps and re-sprouts with herbicides (spot and localized treatments) to ensure that the roots are killed preventing new sprouts and selectively eliminating tall growing vegetation before it reaches a height or density to begin competing with low-growing vegetation. Areas may be replanted or reseeded with low-growing vegetation if there is limited vegetation to re-establish the site. Desirable low-growing plants will not be disturbed on the right-of-way by using selective control methods, and by keeping trucks and equipment on designated access roads and trails. All work will take place in existing rights-of-ways. Slash and debris will be loped and scattered.

Danger Trees-will not be dealt with as a whole but may be marked and identified in the future.

Access roads and Tower sites will be treated using selective and non-selective methods that include, hand cutting, mowing, and herbicide spot, localized and broadcast applications including cut stubble and localized granular treatments

Subsequent entry -

In the future, Danger trees that are off of right-of-way and are potentially unstable and will fall within a minimum distance or into the zone where the conductor swing will be cut. Trees that are an imminent hazard (emergency) will be removed when identified. The danger tree process requires a survey of the trees by a specialized BPA crew that identifies hazard trees along the ROW and marks them. Current easement rights give BPA the right to cut danger trees without compensation since future rights were acquired at the time of original easement acquisition. The tree remains the property of the landowners.

The vegetation management program will be designed to provide a 5-10 year maintenance free interval. The overall vegetation management scheme will be to initially clear and remove all tall rowing trees using a combination of manual, mechanical, and herbicide treatments as outlined in the initial treatment

Future cycles -

Future cycles of work will involve cut stump, basal treatments, or tree cutting. During routine patrols, the ROW will be examined for edge and danger trees with appropriate actions taken

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — Landowners/Managers/Uses for requirements, and List of Landowners/Managers/Uses for a checkbox list.

Rural

- Agricultural
- Grazing lands
- Industrial Forest lands

Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — Methods for Notification and Requesting Information for requirements.

Letters have been sent to any known landowners and operators of the lands involved.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — Requirements and Guidance for Various Landowners/Uses for requirements and guidance, also Residential/Commercial, Agricultural, Tribal Reservations, FS-managed lands, BLM-managed lands, Other federal lands, State/ Local Lands.

All Private lands

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — Landowner Agreements for requirements.

None

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

See handbook — Casual Informal Use of Right-of-way for requirements.

All private land. No casual use expected by the general public

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — Other Potentially Affected Publics for requirements and suggestions.

Area centrally located in mostly Private land area. There has been limited interest by local tribe in the area.

3. IDENTIFY NATURAL RESOURCES

See Handbook — Natural Resources

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — Water Resources for requirements for working near water resources including buffer zones.

Span		Waterbody	T & E?	Method	Herbicide	Application Technique	Buffer	Other
To	From							
19/3	19/4	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
23/2	23/3	Coppei creek Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
25/8	26/1	Whiskey creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
27/6	28/1	Bundy Hollow creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

28/3	28/4	Dustin Hollow Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
29/5	30/1	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
30/5	30/6	Hogeye Hollow Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
31/1	31/2	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
32/4	32/5	S. Fork Touchet River Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

35/3	35/4	Robinson Fork Touchet River Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
35/5	35/6	Robinson Fork Touchet River Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
36/2	36/3	N. Fork Touchet River Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
37/2	37/3	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
37/5	37/6	Hatley Gulch Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

40/1	40/2	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
41/1	41/2	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A	Spot, localized, Ground Broadcast,	See specs	
41/4	41/3	Cougar creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
41/6	42/1	West Patit Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
42/5	42/6	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

43/6	43/7	N. Patit Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
45/5	45/6	Patit Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
46/2	46/3	Patit Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
46/4	46/5	Patit Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron picloram Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

48/4	48/5	Tucannon River Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	Spanned Canyon
57/6	58/1	Pataha Creek Walla Walla N. Lewiston	yes	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	
58/1	58/2	Creek Walla Walla N. Lewiston	No	Manual Herbicide mechanical	2,4-d dicamba clopyralid chlorsulfuron metsulfuron Garlon 4 Garlon 3A Imazapyr	Spot, localized, Ground Broadcast,	See specs	

Salmon T&E Steams

State and/or Private lands within 122 m (400 ft.) of a listed stream. Available: manual, mechanical, spot and localized herbicide, and ground broadcast treatments. No mechanical (machines) within 100 feet of streams except for tower sites and access roads.

Manual: Hand tools and chainsaws

Mechanical: None within 100 feet of stream. Except for Access Roads and Tower sites. No ground disturbing activities that will cause bare soil or erosion within 400 feet from the stream.

Herbicide: Use appropriate buffers as described in the buffer table.

Suggested herbicides: Glyphosate (such as Rodeo®), Garlon 3A, dicamba (Trooper/Vanquish), Escort, clopyralid, picloram, and 2-4-d using wick and spot-foliar treatments (localized) and ground broadcast treatments with handgun only. Garlon 4 can be use when using appropriate buffers. At no time will there be applications to standing or open water.

Streams and Wetlands

State Forest or private lands, within 30.5 m (100 ft.) of a stream and wetland areas. Available: all manual and biological treatments

Manual: Hand tools and chainsaws

Mechanical: None, within 50 feet of streams or wetlands. Only on Access Roads and Tower sites. No ground disturbing activities that will cause bare soil or erosion within 100 feet from the stream.

Herbicide: Use appropriate buffers as described in the buffer table.

Suggested herbicides: Glyphosate (such as Rodeo®), Garlon 3A, dicamba (Trooper/Vanquish), Escort, clopyralid, picloram, and 2-4-d using wick and spot-foliar treatments (localized) and ground broadcast treatments with handgun only. Garlon 4 can be use when using appropriate buffers. Use only Herbicides labeled for wetland areas when treating wetlands. At no time will there be applications to standing or open water.

BPA BUFFER HERBICIDES

HERBICIDE	Ground water Advisory	Surface Water Advisory	Highest Aquatic Toxicity Invertebrates/Vertebrates	Spot treat	Localized	Ground Broadcast
Transline Clopyralid	x		Practically Non Toxic	25 ft	35 ft	100 ft
2,4-d Dimethyl amine Salt	x		Practically Non Toxic	25 ft	35 ft	100 ft
Glypro/Accord Glyphosate			Practically Non Toxic	Up to edge	Up to edge	35 ft
2,4-d Dodecyl/amine salt	x		Slightly toxic	25 ft	35 ft	100 ft
Tordon 22K picloram	x	x	Moderately Toxic	25 ft	35 ft	100 ft
Vanquish dicamba	x	x	Slightly Toxic	25 ft	35 ft	100 ft
Escort			Practically Non Toxic	Up to edge	Up to edge	35 ft
Garlon 3A			Practically Non Toxic	Up to edge	Up to edge	35 ft
Garlon 4*			Highly Toxic	35 ft	100 ft	400 ft

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — Herbicide Use Near Irrigation, Wells or Springs for buffers and herbicide restrictions.

Span		Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
To	From				
44/8	44/9	Spring water source Rittenhouse	None	100 ft	Contact landowner 1 mile west
46/4	46/5	Spring on ROW	None	100 ft	Off of Patit RD

NON-HERBICIDE AREAS

Water sources and wells, parks, and other sensitive lands within 100 feet of Very sensitive Riparian areas or water sources. Hand Cutting Methods only, no Herbicides allowed.

WELLS: No herbicides allowed within 100 feet of wellhead. Use only herbicides that do not have ground or surface water advisories between 100 and 165 feet of wellhead. Approved herbicides include: glyphosate, Imazapyr, triclopyr, Escort,

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — T&E Plant or Animal Species for requirements and determining presence.

Salmon issues, herbicide use, applications, methods of control, buffers, etc. addressed in the water resources section (Section 3.1). No other T&E issues identified by BPA DATA BASE.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

See Handbook — Protecting Other Species for requirements.

Low growing Plant communities will enhance wildlife potential

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — Visual Sensitive Areas for requirements.

N/A

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – Cultural Resources for requirements.

Soil disturbance will be minimal (less than 6 inches) and confined to access roads and tower Sites

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

See Handbook – Steep/Unstable Slopes for requirements.

TWR	to	TWR	Owner	>125 ft.	Constraint	Length	Width	ac
27/5		27/6	PVT	No	Steep	200	60	0.3
28/5		29/1	PVT	No	Steep	450	60	0.6
29/5+1040		30/2+1300	PVT	No	Steep	2025	60	2.8
30/5		30/5+650	PVT	No	Steep	650	60	0.9
31/5		31/6	PVT	No	Steep	150	60	0.2
32/4-200		33/1	PVT	No	Steep	650	60	0.9
33/2		33/2+300	PVT	No	Steep	300	60	0.4
33/3		33/3+350	PVT	No	Steep	350	60	0.5
33/6		33/7	PVT	No	Steep	200	60	0.3
34/1		34/1+325	PVT	No	Steep	325	60	0.4
34/4		35/2	PVT	No	Steep	1000	60	1.4
37/2		37/2+225	PVT	No	Steep	300	60	0.4
37/4		37/5	PVT	No	Steep	350	60	0.5
36/6		37/1	PVT	No	Steep	800	60	1.1
38/2		38/4	PVT	No	Steep	1150	60	1.6
39/5		39/5+250	PVT	No	Steep	250	60	0.3
40/1		40/1+350	PVT	No	Steep	350	60	0.5
40/4		41/1+375	PVT	No	Steep	2750	60	3.8
41/5+575		41/4+500	PVT	No	Steep	2105	60	2.9
41/6		41/6+550	PVT	No	Steep	550	60	0.8
42/3		42/5+560	PVT	No	Steep	2245	60	3.1
43/2		43/3+200	PVT	No	Steep	1032	60	1.4
43/3+440		43/5+300	PVT	No	Steep	1435	60	2.0
43/5+550		43/6+875	PVT	No	Steep	1365	60	1.9
43/6+1175		44/1	PVT	No	Steep	594	60	0.8
52/6		53/1+650	PVT	No	Steep	1300	60	1.8
55/7		56/2	PVT	No	Steep	700	60	1.0

STEEP SLOPES

Manual: Hand tools and chainsaws

Mechanical: Can be used on roads and towers, No Ground disturbing activities on steep slopes

Herbicide: Glyphosate, Picloram, Imazapyr, 2,4-d, Triclopyr (Garlon 3A and Garlon 4), Dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments, as well as for spot-foliar, cut stubble, and ground broadcast-foliar treatments. In addition, Escort and clopyralid can be used for spot foliar and broadcast treatments.

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – Spanned Canyons for requirements.

TWR	to	TWR	Owner	>125 ft.	Constraint	Length
28/3		28/4	PVT	Yes	STC	450
32/4+400		32/4+1925	PVT	Yes	STC	
43/2+200		43/3+440	PVT	Yes	STC	240
43/5+300		43/5+550	PVT	Yes	STC	250
57/6		58/1	PVT	Yes	STC	800

SPANNED CANYONS CODE “STC” ON CUT SHEET

Any areas in the corridor with greater than 38.1 m (125 ft.) vertical distance between the ground surface and transmission lines. Here, removal is periodically required only of individual trees (single tree cuts) that could encroach into the transmission corridor danger zone.

In areas adjacent to STC zones the following treatment will be required. In the area where the conductor clearance is from 70 feet to 125 feet tall growing trees will be controlled in the following manner.

1. All conifers over 14 feet tall will be controlled. Conifers over 25 feet tall will be cut for clearance.
2. Hardwood trees over 30 feet tall will be cut for clearance and treated.
3. Hardwood trees less than 30 feet tall will be left untreated.

Herbicides: NONE.

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — Methods

4.1 List Methods that will be used in areas not previously addressed in steps above.

See Handbook — Manual, Mechanical, Biological, and Herbicides for requirements for each of the methods.

TWR	to	TWR	Owner	>125 ft.	Constraint	Length	Width	ac
26/4		27/1	PVT	No	None	200	60	0.3
35/7		36/2	PVT	No	None	50	60	0.1
39/6		40/1	PVT	No	None	250	60	0.3
44/3		45/5+1000	PVT	No	None	6799	60	9.4

NO ENVIRONMENTAL CONSTRAINTS CODE “A” ON CUT SHEET

State Forest or private lands with no environmental constraints. Available: all manual, mechanical, biological, and herbicidal treatments

Manual: Hand tools and chainsaws

Mechanical: Can be used on roads and towers, all areas suitable for mechanical treatment. No Ground disturbing activities on slopes over 20%

Herbicide: Glyphosate, Picloram, Imazapyr, picloram, 2,4-d, Triclopyr (Garlon 3A and Garlon 4), Dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments, as well as for spot-foliar, cut stubble, and broadcast-foliar treatments. In addition, Escort and clopyralid can be used for spot foliar and broadcast treatments.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — Debris disposal for a checkbox list and requirements.

- Lop and Scatter (Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.)
- Mulch (Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.)

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — Reseeding/replanting for requirements.

See 1.3

5.3 If not using native seed/plants, describe why.

Native will be considered in all mixes. Introduced species are more competitive against invading tall tree species

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

Seeding should be completed when there is enough moisture to allow for 2 months of growth. Seeding can be completed in the late fall, early winter, or early spring.

6. DETERMINE MONITORING NEEDS

See handbook — Monitoring for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Site will be inspected during treatment. In addition routine patrols by BPA ground and aerial patrols

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

Routine patrols by BPA ground and aerial patrols

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — Prepare Appropriate Environmental Documentation for requirements. . Also prepare Supplement Analysis Supplement Analysis for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.

None

Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

No